

Haploid plantlet regeneration through another culture in oilseed Brassica species

ABSTRACT

Anther of five varieties of Brassica species, namely BARI Shariha-7, Tori-7, Agrani, Daulat and Safal were cultured in vitro to observe their regeneration potentiality. Different concentrations and combinations of growth regulators were supplemented in MS medium. The range of callus induction was 12.50- 87.50 %. Maximum callus induction (75.00%) was observed on MS +4 mg/L 2, 4-D + 1.0 mg/L BAP. Among the genotypes, BARI Sharisha-7 showed the highest percentage of callus induction (60.42%). Among the treatments, highest percentage of shoot regeneration (75.00%) was observed on MS + 4 mg/L BAP + 1.0 mg/L NAA. BARI Sharisha-7 also showed the highest rate of plant regeneration (66.67%). Root induction was highest (75%) on half strength MS medium supplemented with 1.0 mg/L IBA and 0.5 mg/L NAA. The plantlets with sufficient roots thus obtained were transferred successfully to plastic pots and subsequently to the field. BARI Sharisha-7 and Tori-7 survived easily in the pots as well as in the field but Safal was very poor in survivability both in the pots and in the field.